PASTERNACK
an INFINITE brand



2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors
Technical Data Sheet

PE45411

Configuration

- 2.4mm Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-047SR, PE-SR047AL, PE-SR047FL
- 5/16 inch Hex

Features

- Max. Operating Frequency 50 GHz
- Excellent VSWR of 1.16:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE45411 2.4mm male connector with solder attachment for PE-047SR, PE-SR047AL and PE-SR047FL is part of our full line of RF components available for same-day shipping. Our 2.4mm male connector operates up to a maximum frequency of 50 GHz and offers excellent VSWR of 1.16:1.

Our 2.4mm male connector PE45411 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		50	GHz
VSWR			1.16:1	
Insertion Loss			0.283	dB
Operating Voltage (AC)			170	Vrms
Dielectric Withstanding Voltage (AC)			500	Vrms
High Potential Voltage 5 to 7.5 MHz			325	Vrms
Corona Discharge at 70,000 ft			125	Vrms
Insulation Resistance	5,000			MOhms
RF Leakage	-90			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45411

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

© 2019 Pasternack Enterprises All Rights Reserved

PASTERNACK
an INFINITE brand



2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors
Technical Data Sheet

PE45411

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 18	18 to 26.5	26.5 to 40	40 to 50		GHz
VSWR, Max	1.1:1	1.12:1	1.14:1	1.16:1		

Electrical Specification Notes:
Insertion loss: 0.04 x sqrt(fGHz) dB.

Mechanical Specifications

Size

Length	0.56 in [14.22 mm]
Width/Dia.	0.312 in [7.92 mm]
Height	0.35 in [8.89 mm]
Mating Cycles	500 Cycles
Mating Torque	8 to 10 in-lbs [0.90 to 1.13 Nm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 50 µin minimum
Insulation	PEI	
Body	Beryllium Copper	Gold over Nickel 50 µin minimum
Coupling Nut	Passivated Stainless Steel	ASTM-A582
Retaining Ring	Beryllium Copper	
Gasket	Silicone Rubber	

Environmental Specifications

Temperature

Operating Range	-65 to +150 deg C
Shock	MIL-STD-202, Method 213, Condition I
Vibration	MIL-STD-202, Method 204, Condition D
Thermal Shock	MIL-STD-202, Method 107, Condition B
Salt Spray	MIL-STD-202, Method 101, Condition B, 5% salt solution

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45411

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

© 2019 Pasternack Enterprises All Rights Reserved



2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45411

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

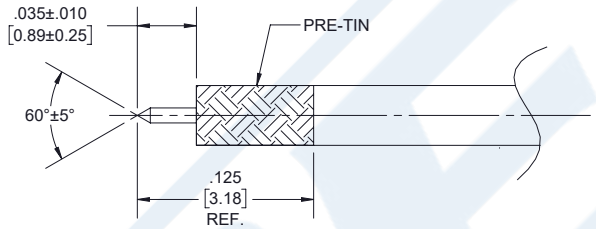
© 2019 Pasternack Enterprises All Rights Reserved



2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

Assembly Instruction

Assembly Instructions

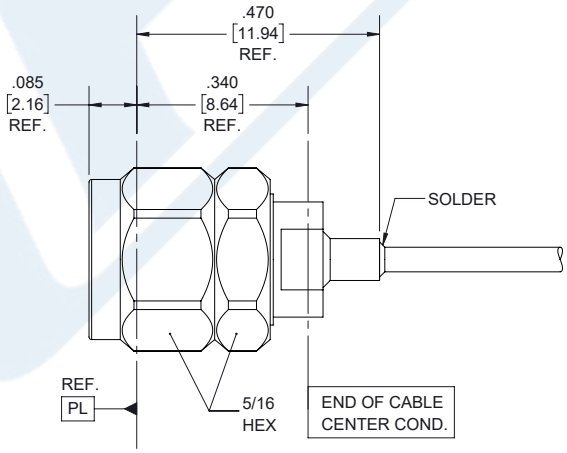


STEP 1:

- PRE-TIN CABLE OUTER JACKET OVER APPROX. LENGTH SHOWN.
- TRIM CABLE TO EXPOSE CENTER CONDUCTOR AS SHOWN.
- POINT CENTER CONDUCTOR AS INDICATED.

STEP 2:

- INSERT CABLE INTO CONNECTOR UNTIL CENTER CONDUCTOR PLUGS IN AND CABLE SEATS IN CONNECTOR BORE.
- SOLDER CABLE JACKET TO BODY WHERE SHOWN APPLYING HEAT TO EXTENDED BODY TAIL.



Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45411

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

© 2019 Pasternack Enterprises All Rights Reserved

2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL



RF Connectors
Technical Data Sheet

PE45411

2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45411

URL: https://www.pasternack.com/2.4mm-male-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe45411-p.aspx

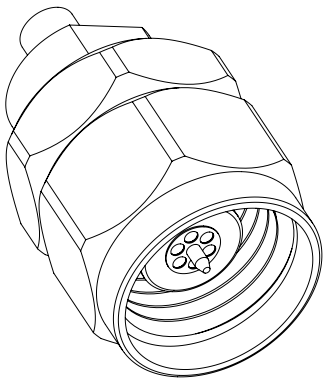
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

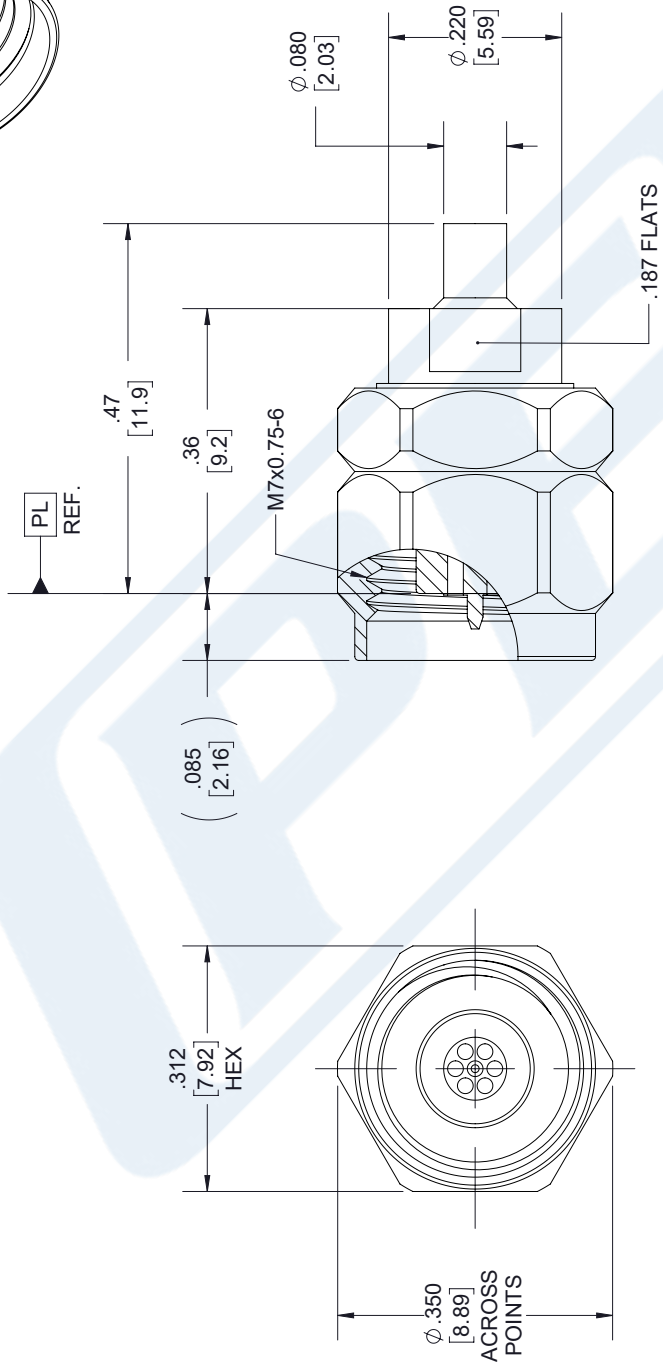
Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

© 2019 Pasternack Enterprises All Rights Reserved

PE45411 CAD Drawing

2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL





STANDARD TOLERANCES
.X ±0.2
.XX ±0.02
.XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE: PE45411

CAD FILE 110217 | SCALE N/A | SIZE A | 7361

CAGE CODE 53919

PASTERNACK®
THE ENGINEER'S RF SOURCE
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | **Fax:** (949) 261-7451
Website: www.pasternack.com | **E-Mail:** sales@pasternack.com

© 2019 Pasternack Enterprises All Rights Reserved

PASTERNACK
an INFINITE brand



SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz

RF Connectors
Technical Data Sheet

PE45249

Configuration

- SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type
- Solder Attachment

Features

- Max. Operating Frequency 8 GHz
- Excellent VSWR of 1.15:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-DTL-45204
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE45249 SMP female right angle connector with solder attachment for PE-047SR, PE-SR047AL and PE-SR047FL is part of our full line of RF components available for same-day shipping. Our SMP female connector operates up to a maximum frequency of 8 GHz and offers excellent VSWR of 1.15:1. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated. Its right angle body geometry allows for easier connections in tight spaces. Pasternack 8 GHz SMP connectors are designed to offer a low cost alternative where the SMP form factor is desired but the standard SMP frequency range is not needed. The line of 8 GHz SMP connectors is fully compatible with industry standard SMP and GPO® connectors. These SMP connectors offer a low cost high performance blind-mate solution for lower frequency applications. The Male versions of the 8 GHz SMP is available in Full Detent, Limited Detent, and Smooth Bore versions.

Our SMP female right angle connector PE45249 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
VSWR			1.15:1	

Mechanical Specifications

Size

Length	0.28 in [7.11 mm]
Width/Dia.	0.187 in [4.75 mm]
Weight	0.002 lbs [0.91 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz PE45249

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

© 2019 Pasternack Enterprises All Rights Reserved



SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-DTL-45204
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold
Body	Beryllium Copper	Gold MIL-DTL-45204

Environmental Specifications

Temperature

Operating Range	-55 to +155 deg C
Humidity	MIL-STD-202, Method 106 (except 7b omitted)
Shock	MIL-STD-202, Method 213, Condition I
Vibration	MIL-STD-202, Method 204, Condition D
Salt Spray	MIL-STD-202, Method 101, Condition B

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz PE45249

URL: https://www.pasternack.com/smp-female-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe45249-p.aspx

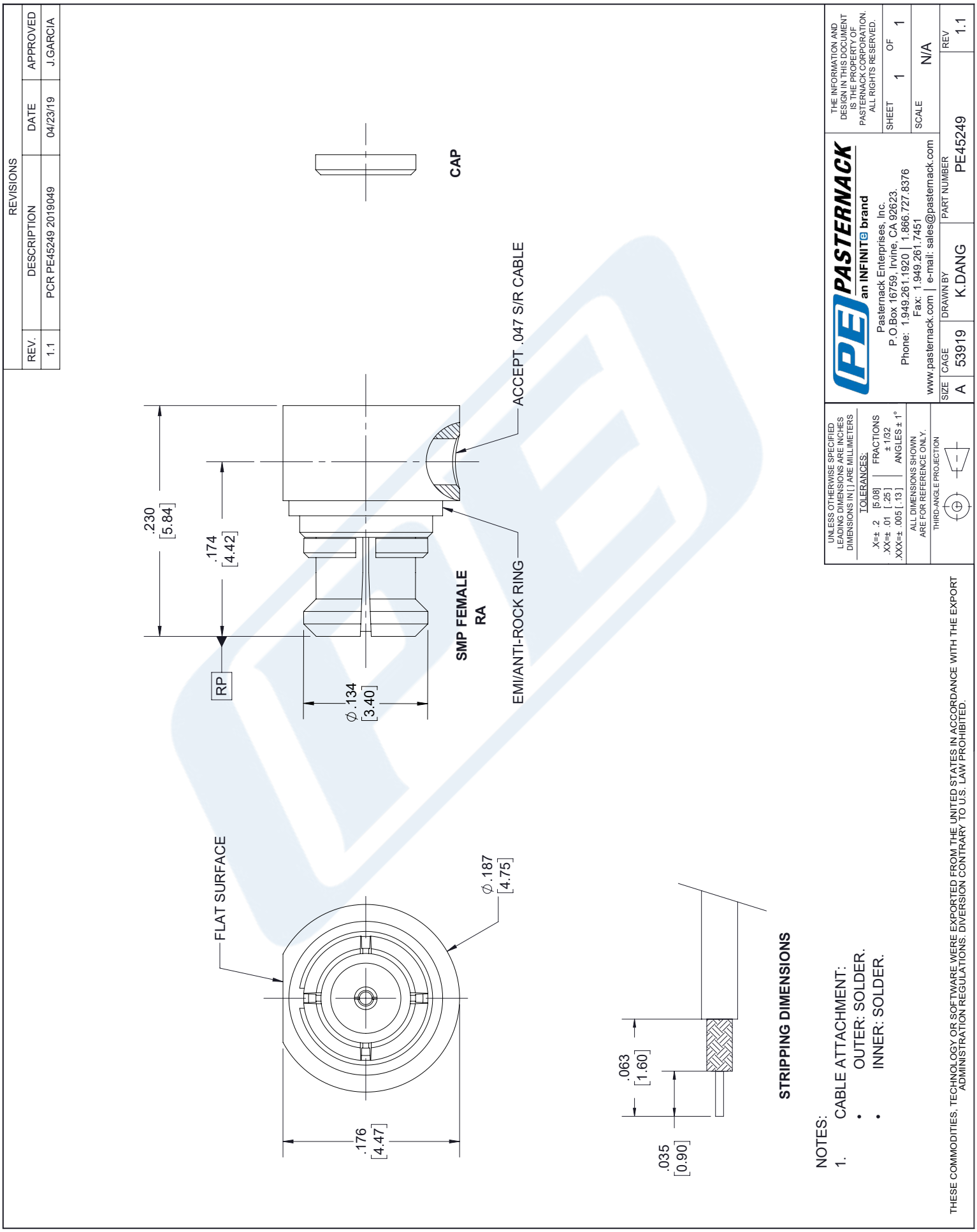
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

© 2019 Pasternack Enterprises All Rights Reserved

PE45249 CAD Drawing

SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz



© 2019 Pasternack Enterprises All Rights Reserved

PASTERNACK®
THE ENGINEER'S RF SOURCE

047 Semi-rigid Coax Cable with Copper Outer Conductor

TECHNICAL DATA SHEET PE-047SR

Configuration

Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Shield Materials	Copper

Electrical Specifications

Impedance, Ohms	50
Maximum Operating Frequency, GHz	40
Dielectric Withstanding Voltage, Vrms	2,000

Electrical Specifications by Frequency

Frequency 1

Frequency, MHz	1000
Attenuation, dB/100ft [dB/100m]	40 [131.23]
Power Handling, Watts	32

Frequency 2

Frequency, GHz	10
Attenuation, dB/100ft [dB/100m]	130 [426.51]
Power Handling, Watts	9

Frequency 3

Frequency, GHz	20
Attenuation, dB/100ft [dB/100m]	190 [623.36]
Power Handling, Watts	6.5

Mechanical Specifications

Temperature

Operating Range, deg C	-55 to +100

Inner Conductor

Number of Strands	1
Material	Copper Clad Steel
Plating	Silver
Diameter, in [mm]	0.011 [0.28]

Dielectric:

Type	PTFE
Diameter, in [mm]	0.037 [0.94]

Shield:

Number of	1
Material 1	Copper
Diameter, in [mm]	0.047 [1.19]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 047 Semi-rigid Coax Cable with Copper Outer Conductor PE-047SR

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

© 2014 Pasternack Enterprises All Rights Reserved

047 Semi-rigid Coax Cable with Copper Outer Conductor

TECHNICAL DATA SHEET PE-047SR

Jacket:

Diameter, in [mm]	0.047 [1.19]
One Time Minimum Bend Radius, in [mm]	0.05 [1.27]
Weight, lbs/ft [Kg/m]	0.005 [0.01]

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant	
REACH Compliant	12/19/2011

Plotted and Other Data

Notes:

- Values at +25 °C, sea level

047 Semi-rigid Coax Cable with Copper Outer Conductor from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 047 Semi-rigid Coax Cable with Copper Outer Conductor PE-047SR

URL: http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-copper-pe-047sr-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

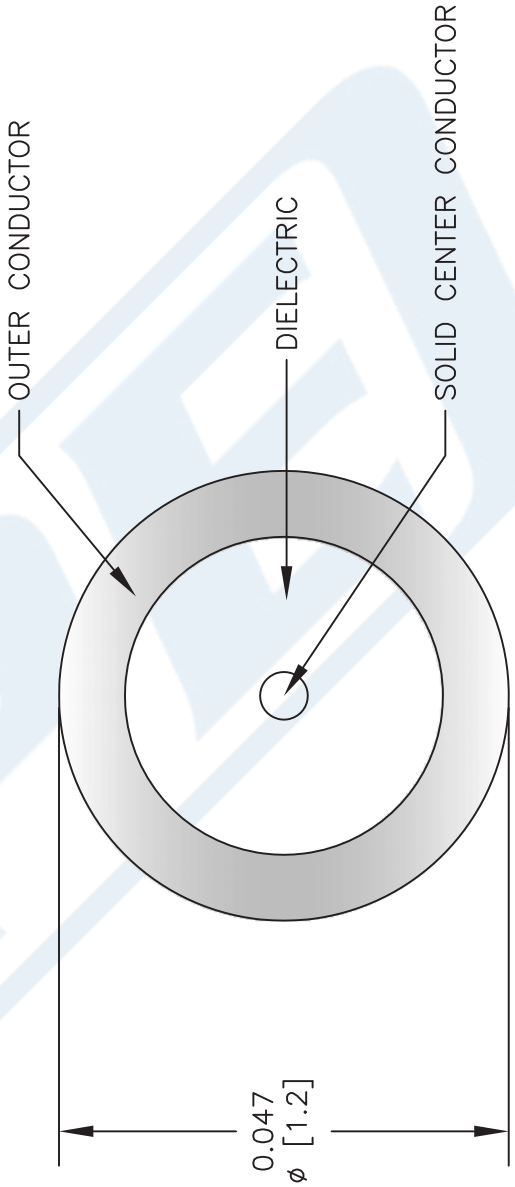
Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

© 2014 Pasternack Enterprises All Rights Reserved

PE-047SR CAD Drawing

047 Semi-rigid Coax Cable with Copper Outer Conductor





NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE **PE-047SR**

CAD FILE 073113 | SCALE N/A | SIZE A | 2233

FSCM NO. 53919

PASTERNACK®
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | **Fax:** (949) 261-7451
Website: www.pasternack.com | **E-Mail:** sales@pasternack.com

© 2014 Pasternack Enterprises All Rights Reserved